

Chapter 4 Women at Risk

Chapter 4 provides a profile of the HIV/AIDS epidemic among women in Massachusetts based on several different data sources. HIV and AIDS case data are presented to provide a demographic description of women living with HIV/AIDS and to describe the ways in which women were exposed to HIV. HIV Counseling and Testing data are presented to provide information on women who were tested for HIV at state funded testing sites. Data collected about admissions among women to state funded substance abuse treatment services are presented to describe substance using women, specifically those reporting use of a needle to inject drugs. Lastly, data from a survey of family planning clients are presented to describe HIV risk behaviors among this population of women.

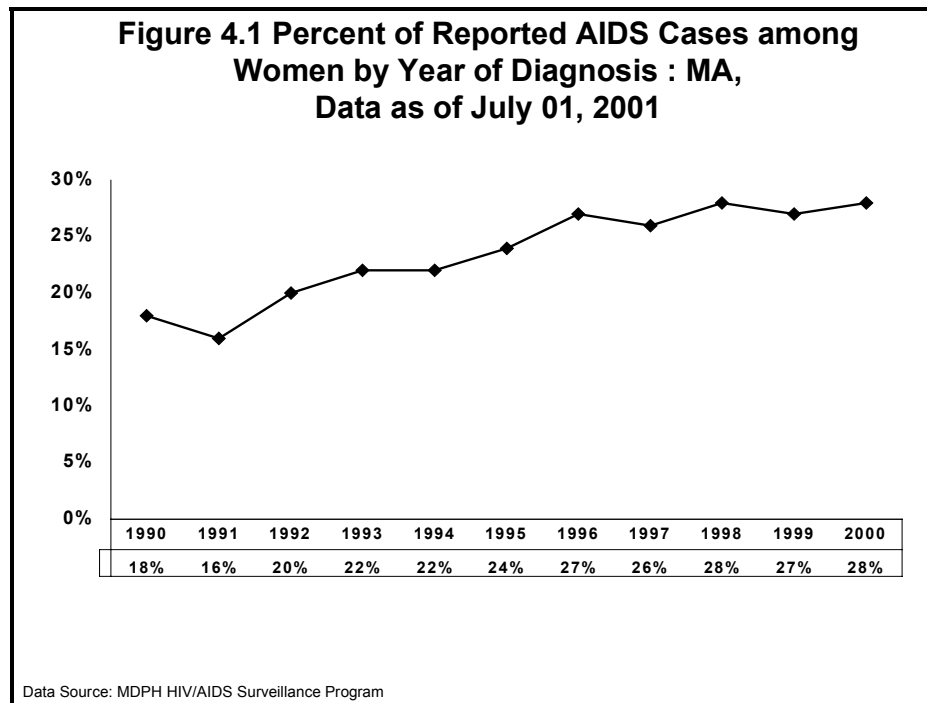
Over time, the number of AIDS cases diagnosed and reported has decreased for both men and women. However, women have accounted for an increasing proportion of AIDS diagnoses. From 1990 to 2000, the percent of AIDS diagnoses that were among women increased 10 percentage points from 18% to 28%.

The majority of women living with HIV/AIDS in Massachusetts are women of color (36% Black and 27% Hispanic). The most commonly reported mode of exposure to HIV among all women living with HIV/AIDS is injection drug use. This is also the most frequently reported mode of exposure for the majority of White women (57%). For Hispanic women, heterosexual sex is the most frequently reported mode of exposure (45%); whereas the largest proportion of Black women (36%) were reported with presumed heterosexual sex as their exposure mode. Mode of exposure also varies among women across country of origin. For women born in the US the predominant reported mode of exposure to HIV is injection drug use; for women born in US dependencies heterosexual sex; and for women born outside of the US presumed heterosexual sex.

I. Massachusetts HIV/AIDS Prevalence – HIV and AIDS Case Data

Women living with HIV/AIDS as compared to all people living with HIV/AIDS in the state:

- Of all reported cases, Females account for 31% of people living with HIV infection without an AIDS diagnosis, 26% of people living with AIDS, and 28% of people living with HIV/AIDS.
- Among women living with HIV/AIDS, 33% of infection was attributed to heterosexual sex, while among all people in Massachusetts, heterosexual exposure was reported for 13% of HIV infection.
- Women of color represent 63% of women with HIV infection/AIDS, while people of color represent 49% of all people living with HIV infection/AIDS in Massachusetts.



- The proportion of AIDS cases diagnosed and reported that are among women has increased from 18% to 28% for the period 1990-2000. (See Figure 4.1)

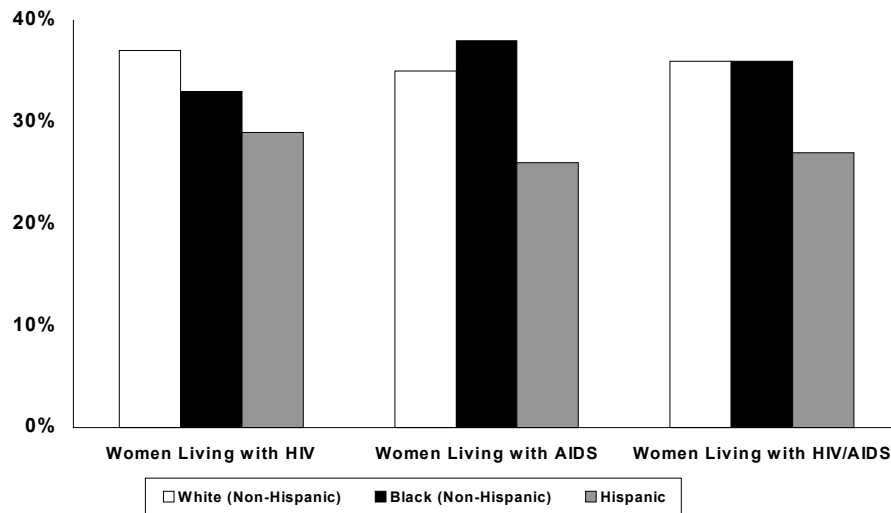
Table 4.1 Women Living with HIV Infection/AIDS by Race/Ethnicity and Exposure Mode: MA*Data as of July 1, 2001*

	HIV		AIDS		HIV/AIDS	
By Race / Ethnicity:	N	%	N	%	N	%
White (non-Hispanic)	620	37%	653	35%	1,273	36%
Black (non-Hispanic)	550	33%	721	38%	1,271	36%
Hispanic	485	29%	492	26%	977	27%
Asian / Pacific Islander	9	1%	9	<1%	18	1%
American Indian/Alaskan Native	7	<1%	2	<1%	9	<1%
Unknown	15	1%	5	<1%	20	1%
Total	1,686		1,882		3,568	
By Exposure Mode:	N	%	N	%	N	%
Injection Drug Use (IDU)	621	37%	770	41%	1,391	39%
Heterosexual Sex	521	31%	642	34%	1,163	33%
◦ Heterosexual Sex w/IDU	282	17%	303	16%	585	16%
◦ Heterosexual Sex w/ Person w/ HIV or AIDS	225	13%	314	17%	539	15%
◦ Female Sex w/ Bisexual Male	11	1%	13	1%	24	1%
◦ Other Heterosexual Sex	3	<1%	12	1%	15	<1%
Presumed Heterosexual Sex	433	26%	340	18%	773	22%
Blood / Blood products	6	<1%	42	2%	48	1%
Pediatric	-- ¹	-- ¹	39	2%	39	1%
Other	1	<1%	0	0%	1	<1%
NIR	104	6%	49	3%	153	4%
Total	1,686		1,882		3,568	
Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding)						
1 Pediatric HIV infection surveillance is performed through a separate surveillance system, the Pediatric Spectrum of Disease (PSD) Project. HIV cases under age 13 are not included in totals.						

- In MA as of July 1, 2001, there were 1,686 females living with HIV infection without an AIDS diagnosis, and 1,882 females living with AIDS, for a total of 3,568 females living with HIV infection/AIDS.
- 63 % of women living with HIV infection/AIDS in MA are women of color. (See Figure 4.2).
- Injection drug use is the most frequently reported exposure to HIV among women living with HIV infection/AIDS in MA. (See Figure 4.3).
- Injection drug use and heterosexual sex with an injection drug user combined account for 55% of HIV exposures among women living with HIV infection/AIDS in MA.

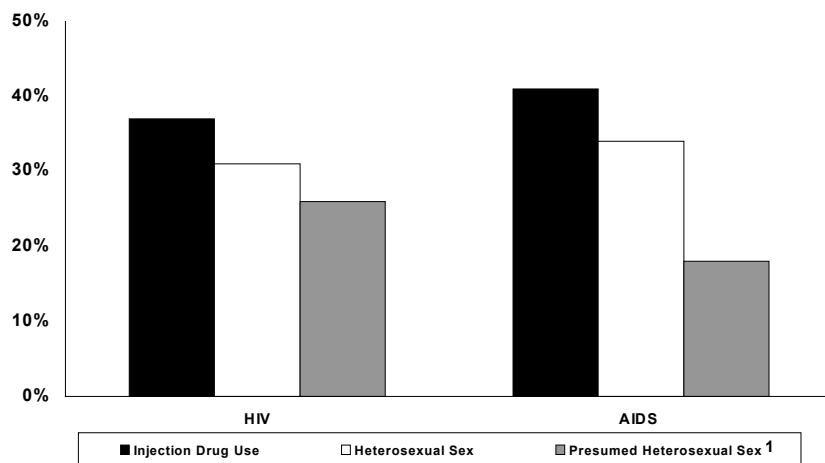
- Of women living with HIV infection/AIDS who were exposed to HIV through heterosexual sex, about half had sex with an injection drug user and about half had sex with a man living with HIV infection or AIDS.

Figure 4.2 Women Living with HIV, AIDS, and HIV/AIDS by Race/Ethnicity: MA, Data as of July 01, 2001



Data Source: MDPH HIV/AIDS Surveillance Program

Figure 4.3 Women Living with HIV/AIDS by Mode of Exposure to HIV: MA, Data as of July 01, 2001



¹ Includes reported exposure of heterosexual sex with a person of unknown HIV status and risk profile and denial of all other risk factors; Data Source: MDPH HIV/AIDS Surveillance Program

Table 4.2 Women Living with HIV Infection by Age at HIV Diagnosis and Women Living with AIDS by Age at AIDS Diagnosis: MA

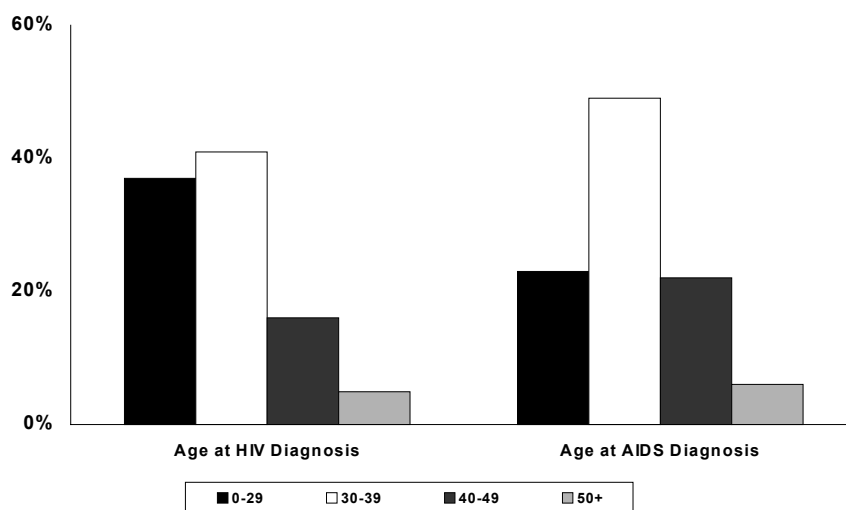
Data as of July 1, 2001

Age At Diagnosis, in years:	HIV		AIDS	
	N	%	N	%
Under 13	-- ¹	-- ¹	31	2%
13 to 19	59	3%	21	1%
20 to 24	206	12%	89	5%
25 to 29	379	22%	287	15%
30 to 34	373	22%	468	25%
35 to 39	312	19%	448	24%
40 to 44	188	11%	282	15%
45 to 49	91	5%	135	7%
50+	78	5%	121	6%
Total	1,686		1,882	

1 Pediatric HIV infection surveillance is performed through a separate surveillance system, the Pediatric Spectrum of Disease (PSD) Project. HIV cases under age 13 are not included in totals.
Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding)

- Comparing women living with HIV infection only to women living with AIDS, a larger proportion of women living with HIV infection were diagnosed before the age of 30. (See Figure 4.4).

Figure 4.4 Women Living with HIV by Age at HIV Diagnosis and Women Living with AIDS by Age at AIDS Diagnosis: MA, Data as of July 01, 2001



Data Source: MDPH HIV/AIDS Surveillance Program

Table 4.3 Women Living with HIV Infection/AIDS by Current Age: MA <i>Data as of July 1, 2001</i>		
	HIV/AIDS	
Current Age, in years:	N	%
Under 13	25 ¹	1%
13 to 19	24	1%
20 to 24	86	2%
25 to 29	245	7%
30 to 34	627	18%
35 to 39	876	25%
40 to 44	781	22%
45 to 49	485	14%
50+	419	12%
Total	3,568	
1 Pediatric HIV infection surveillance is performed through a separate surveillance system, the Pediatric Spectrum of Disease (PSD) Project. HIV cases under age 13 are not included in totals. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding)		

- The majority (73%) of women living with HIV infection/AIDS in MA are currently over 35 years old.
- Three percent of women living with HIV infection/AIDS in MA are currently adolescents (13-24 years old).

Table 4.4 Women Living with HIV Infection/AIDS, Race/Ethnicity by Exposure Mode: MA <i>Data as of July 1, 2001</i>								
	White NH		Black NH		Hispanic		Other / Und.	
By Exposure Mode:	N	%	N	%	N	%	N	%
Injection Drug Use (IDU)	720	57%	323	25%	337	34%	11	23%
Heterosexual Sex	321	25%	384	30%	440	45%	18	38%
Presumed Heterosexual Sex	159	12%	456	36%	145	15%	13	28%
Other/Undefined	73	6%	108	8%	55	6%	5	11%
Total	1,273		1,271		977		47	
Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding)								

- The distribution across exposure mode among women living with HIV infection and AIDS varies by race/ethnicity.
- Injection drug use is the reported mode of exposure for the majority (57%) of White women living with HIV infection and AIDS (See Figure 4.5).
- Heterosexual sex (30%) and presumed heterosexual sex (36%) are the reported exposures for 66% of Black women living with HIV infection and AIDS (See Figure 4.5).
- Heterosexual sex (45%) and presumed heterosexual sex (15%) are the reported exposures for 60% of Hispanic women living with HIV infection and AIDS (See Figure 4.5).
- Injection drug use accounts for the highest percentage across exposure modes among White women living with HIV infection/AIDS at 57%, followed by Hispanic women (34%) and Black women (25%) (See Figure 4.5).

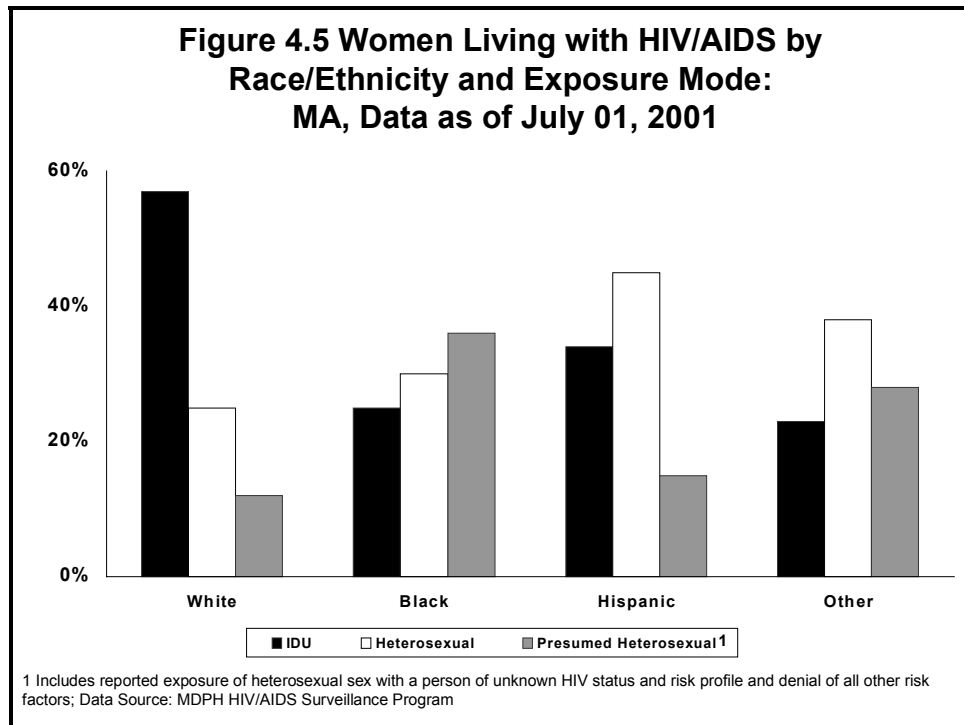


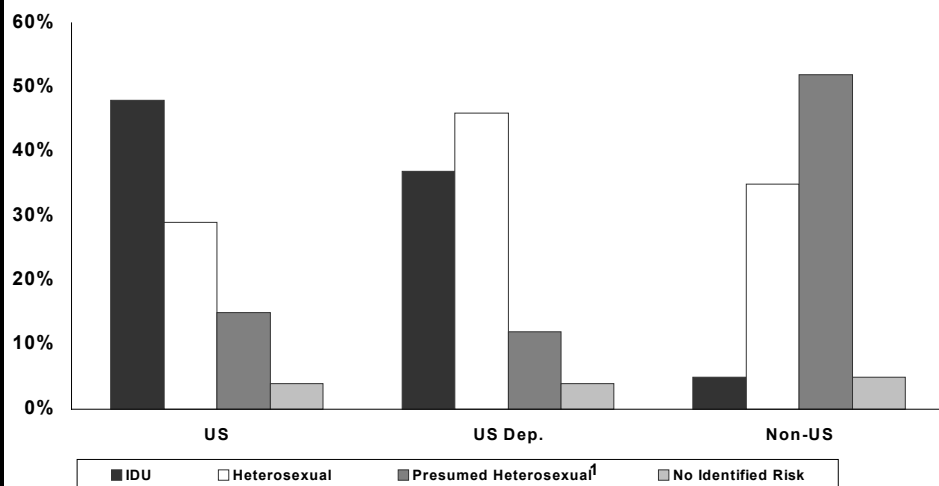
Table 4.5 Women Living with HIV Infection/AIDS by Exposure Mode and Country of Origin: MA*Data as of July 1, 2001*

	US		US Dependency		Non-US	
By Exposure Mode:	N	%	N	%	N	%
Injection Drug Use (IDU)	1,177	48%	180	37%	34	5%
Heterosexual Sex	714	29%	221	46%	228	35%
Presumed Heterosexual Sex	372	15%	58	12%	343	52%
Other/Undefined	169	7%	23	5%	49	7%
Total	2,432		482		654	

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding)

- In MA, 2,432 (68%) of women living with HIV infection/AIDS were born in the US, 482 (14%) were born in a US Dependency, and 654 (18%) were born outside of the US.
- The distribution across exposure mode among women living with HIV infection and AIDS varies by country of origin.
- Injection drug use accounts for the largest proportion (48%) of reported exposures among women born in the US, while heterosexual sex accounts for the largest proportion (46%) of reported exposures among women born in US dependencies, and the largest proportion (52%) of women born outside the US were reported with presumed heterosexual sex as their primary risk for HIV infection.

Figure 4.6 Women Living with HIV/AIDS by Mode of Exposure and Country of Origin: MA, Data as of July 01, 2001



¹ Includes reported exposure of heterosexual sex with a person of unknown HIV status and risk profile and denial of all other risk factors; Data Source: MDPH HIV/AIDS Surveillance Program

II. Seroprevalence Data - Unlinked HIV Seroprevalence program

Table 4.6 HIV and Syphilis Seropositivity at Three Publicly Funded STD Clinics¹ Among Women: MA, 1990 – 2000			
YEAR:	TOTAL TESTS	% HIV POSITIVE	% SYPHILIS POSITIVE
1990	1,005	3%	10%
1991	1,318	3%	9%
1992	1,150	4%	8%
1993	899	2%	6%
1994	742	2%	6%
1995	767	2%	4%
1996	707	3%	4%
1997	833	2%	6%
1998	833	2%	4%
1999	686	3%	4%
2000	689	1%	3%
1 Tests performed at 3 selected publicly funded STD clinic sites. (People also test for HIV and Syphilis at non-publicly funded sites for whom data are not represented in this table) Data Source: MDPH Bureau of Communicable Disease Control (percentages may not add up to 100% due to rounding)			

- During the period 1990-2000, HIV seropositivity for women tested at three publicly funded STD clinics was between one and four percent.
- Syphilis seropositivity for women in the same sample has declined from 10% in 1990 to 3% in the year 2000, with the range for the last 5 years being 3% to 6%.

III.A. Service Utilization – HIV Counseling and Testing Data

Table 4.7 Number and Percent of Positive HIV Tests¹ by Race/Ethnicity, Age of Client and Risk Category, For Females: MA, 2000			
HIV Tests by Race/Ethnicity of Client:	TOTAL TESTS	POSITIVE RESULTS	PERCENT POSITIVE
White (not Hispanic)	9,366	22	<1%
African-American (not Hispanic)	2,435	52	2%
Hispanic/Latino	5,081	63	1%
Asian	404	1	<1%
American Indian/Aleutian/Eskimo	68	0	0%
Haitian	378	8	2%
Brazilian	455	6	<1%
Portuguese	185	0	0%
Cape Verdean	197	3	2%
Other	0	0	0%
Unknown	719	10	1%
HIV Tests by Age of Client, in years:	TOTAL TESTS	POSITIVE RESULTS	PERCENT POSITIVE
Under 13	25	1	4% ²
13 to 19	2,351	4	<1%
20 to 24	5,145	19	<1%
25 to 29	3,383	25	1%
30 to 34	2,687	31	1%
35 to 39	2,150	39	2%
40 to 44	1,516	23	2%
45 to 49	855	12	1%
50+	1,176	11	1%
HIV Tests by Risk Category:	TOTAL TESTS	POSITIVE RESULTS	PERCENT POSITIVE
Male Sex w Male	0	0	0%
Male IDU sex with Male	0	0	0%
Injecting Drug User	1,820	24	1%
Heterosexual Sex	16,603	124	1%
Other	865	17	2%
Total	19,288	165	1%
1 Tests performed at publicly funded counseling and testing sites. (People also test for HIV at non-publicly funded sites for whom data are not represented in this table)			
2 Caution should be used in interpreting percentages based upon both a small numerator and denominator.			
Data Source: MDPH HIV/AIDS Bureau Counseling and Testing Program (percentages may not add up to 100% due to rounding)			

- In year 2000, most of the women who tested for HIV at publicly funded Counseling and Testing sites were White non-Hispanic (49%).
- African American women accounted for 13% of all women tested for HIV at publicly funded Counseling and Testing sites, and 32% of women testing positive for HIV at these sites.
- Latinas accounted for 26% of all women tested for HIV at publicly funded Counseling and Testing sites, and 38% of women testing positive for HIV at these sites.
- More women in their 20s (20-29) were tested than in any other age category, however more women tested positive in the 35-44 age group.
- The majority (86%) of women who tested positive for HIV reported heterosexual sex as their risk for HIV infection.

Table 4.8 Number and Percent of Positive HIV Tests¹ by Year of Test for Female Clients: MA, 1992-2000

HIV Tests by Year of Test:	Total Tests	Total Positive Results	Percent Positive
1992	14,345	232	2%
1993	15,348	232	2%
1994	17,651	217	1%
1995	19,983	271	1%
1996	22,159	255	1%
1997	19,784	243	1%
1998	19,133	202	1%
1999	18,492	163	1%
2000	19,288	165	1%

1 Tests performed at publicly funded counseling and testing sites. (People also test for HIV at non-publicly funded sites for whom data are not represented in this table)

- The number of women who tested for HIV at publicly funded Counseling and Testing sites increased by nearly 8,000 from 1992 to 1996 and then declined by almost 3,000 through year 2000.
- The percent of women testing positive decreased from 2% to 1% from 1992 to 1994 and has remained at one percent through 2000.

III.B. Service Utilization - Bureau of Substance Abuse Services (BSAS)

Table 4.9 Characteristics of Women Admitted to State-funded Substance Abuse Treatment Programs: MA, Fiscal Year 2000¹				
	All Women Admitted		Women Admitted Reporting Needle Use in the Past Year	
By Age:	N	%	N	%
0-20	2,587	8%	614	7%
21-29	7,472	23%	3,169	34%
30-39	12,907	41%	3,872	41%
40-49	7,222	23%	1,620	17%
50+	1,669	5%	163	2%
By Race/Ethnicity:	N	%	N	%
White	23,072	72%	7,283	77%
Black	4,295	13%	555	6%
Latino	3,462	11%	1,308	14%
Other	1,028	3%	292	3%
By Education:	N	%	N	%
< High school	10,453	33%	3,274	35%
High School graduate	14,100	44%	4,283	45%
> High School	7,304	23%	1,881	20%
By Primary Substance:	N	%	N	%
Alcohol	12,942	41%	614	7%
Heroin	11,895	37%	8,310	88%
Cocaine	1,837	6%	241	3%
Crack	2,198	7%	103	1%
Marijuana	1,617	5%	40	<1%
Other	1,326	4%	130	1%
By Region²:	N	%	N	%
Western HSR	5,085	16%	954	9%
Central HSR	3,960	13%	1,587	17%
Northeast HSR	5,366	17%	1,964	21%
MetroWest HSR	4,517	14%	1,269	14%
Southeast HSR	6,722	21%	2,041	22%
Boston HSR	5,967	19%	1,585	17%
By Other Variables:	N	%	N	%
Employed	6,483	20%	808	9%
Not Employed	25,374	80%	8,630	91%
Homeless	3,893	12%	1,461	15%
Not Homeless	27,964	88%	7,977	85%
Pregnant	585	<1%*	220	<1%*
Total³	31,857		9,438	
1 Fiscal Year 2000 = 6/30/99 – 7/1/00; 2 Region is the Health Service Region (HSR) of the client's primary residence; 3 Not all categories add up to Total due to missing data; Data Source: MDPH Bureau of Substance Abuse Services				

- In 2000, 31,857 women were admitted to state-funded substance abuse treatment (27% of total admissions). Of these, 9,438 (30%) reported needle use in the past year.
- A higher percentage of women who reported needle use were in the 20-29 age group (34%) compared to all women admitted to treatment (23%).
- Women who report needle use were not more or less likely to be high school or college educated, homeless, or pregnant as compared to all women admitted to state-funded treatment programs; they were somewhat less likely to be currently employed (9% vs. 20%)
- The racial distribution of women admitted to state-funded treatment services is similar for all women as for women who reported needle use in the past year. One notable distinction is that Black women represent 13% of all women admitted to treatment programs but only 6% of those reporting needle use in the past year.

III.C. Service Utilization – Family Planning Client Survey

Table 4.10 Risk Characteristics of Respondents to the Family Planning Client Survey of Massachusetts Women, 1998

N=2,081

Behaviors	Percent (%) New Enrollees
Alcohol used at last intercourse	21%
Drugs used at last intercourse	6%
Both alcohol and drugs used at last intercourse	10%
Anal Intercourse Ever	27%
First intercourse under 14 years of age	21%
Ever coerced into sex	28%
Abnormal pap smear ever	33%
STD (ever)	21%
Inconsistent condom use among non-monogamous women	57%
Injection drug use ever	1%
Multiple sex partners in past 12 months	27%
Male partner's refusal of condom use (ever)	20%
Male partner believed to have HIV risk(s)	58%

¹ Data Source: MDPH Bureau of Family and Community Health and HIV/AIDS Bureau

Selected Findings from the Family and Planning Client Survey:

- Of women who had been monogamous during the previous 12 months, 47% said they believed that their current sexual partner or a prior one had other partners.
- Of the 27% of respondents who had not been monogamous during the past year, 65% said they and their partner had not used condoms the last time they had intercourse.
- Four in ten (39%) women had ever obtained an HIV test, and 58% had asked sexual partners whether they had been tested.
- Women who reported ever having had sexual contact with women had significantly higher levels of most HIV risk characteristics and behavior than other respondents. However, because of the low number of respondents reporting this history, control for other potentially confounding factors was not possible.

- Women who first had intercourse at age 14 or younger were found to have a higher prevalence of some HIV risks, including STDs, anal intercourse, and coerced sex.
- Teens were twice as likely as older women to report non-injection drug use by themselves and/or their partners the last time they had intercourse.
- Smokers were 1.6 times as likely as nonsmokers to have first had sex before age 15. They were 1.4 times as likely as nonsmokers to report non-injection drug use and 1.8 times as likely to report alcohol use at last intercourse.

